

# STATE OF RHODE ISLAND

## CLO EDUCATION DECK

March, 2021



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# **EXECUTIVE SUMMARY**

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# WHY CLOS COULD MAKE SENSE FOR ERSRI

- **Consistent with our views on Credit, we continue to look for ways to improve the Income Class**
  - In the previous asset allocation review, we looked to diversify away from High Yield and Bank Loans making up the lion share of the Income class
  - We focused on allocations that could help improve on the risk-adjusted returns of High Yield and Bank Loans
- **We also discussed moving away from smaller allocations and investing in areas of the market where we have higher conviction**
- **CLOs represent an opportunity to continue to diversify the Income class and add a higher return element to it**
  - ERSRI currently has exposure to CLOs within its IG Securitized allocation
    - Roughly ~8% of Loomis's allocation\* is invested in AAA & AA rated CLOs
  - The return potential for CLOs are attractive and its an area of the market that is alpha rich relative to other credit segments



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\*Loomis's IG Securitized allocation is roughly 2.70% of the ERSRI Fund as of 2.28.2021

# RETURN EXPECTATIONS FOR CLOS



\*The above is based on NEPC's expected 10 year returns and standard deviation



# NEPC IMPLEMENTATION RECOMMENDATION

- **Relative to other tranches, CLO Mezz/Equity offer the greatest return potential**
  - With that said, investors must be comfortable with its liquidity, market volatility, and first-loss exposure to credit risk
- **Investing in CLO Equity is typically done in more of a drawdown vehicle/structure**
  - This is the most typical implementation but not required
  - Drawdown vehicles offer greatest asset/liability alignment as investors cannot redeem during periods of market volatility, which is when CLOs can add long-term value by purchasing loans at a discount to par
  - Evergreen funds offer better vintage diversification but must be structured in a way that reduces the risk of forced selling to meet potential investor redemptions
- **Diversification across the investment is important but is thought of slightly differently than other allocations**
  - There's some inherent diversification within CLOs which typically invest across 150-300 underlying loans across 15-25 different sectors
  - Vintage year diversification should be an area of focus as it reduces the exposure to a concentrated reinvestment period
    - 2003 vintages were issued in a strong credit environment but their reinvestment period coincided with the early stages of the financial crisis and resulted in sharp losses as loan liquidity dried up
    - In a less extreme example, early 2.0 vintages that had exposure to Oil & Gas with reinvestment periods coinciding with the energy sell-off in the mid-2010s faced pressure and losses



# **CLO 101: INTRODUCTION**

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# WHAT IS A CLO?

- **Collateralized loan obligations (CLOs) are structured securities backed by an industry-diverse pool of speculative grade loans**
  - CLO indentures typically require at least 90% of the underlying loans to be senior secured
- **There are two primary types of CLOs in the US market**
  - **Broadly Syndicated CLOs** – “BSL CLOs” are backed by collateral consisting of broadly syndicated loans, the largest portion of the bank loan market. These are syndicated by originating banks to CLOs, mutual funds, and other loan investors
    - BSL CLOs make up over 90% of the US CLO market
  - **Middle Market CLOs** – “MM CLOs” are backed by private loans to middle market companies. MM CLOs have seen a growing market share over the last several years as direct lending has resulted in high growth within middle market lending
- **Broadly syndicated loans are structured and arranged by more than one bank or lender**
- **A typical BSL CLO contains over 250 loans from over 100 separate companies across a dozen or more different industry categories**
- **CLOs exist to earn an arbitrage between their assets and liabilities**



# CLO BALANCE SHEET EXAMPLE

## Assets

150-300 Broadly Syndicated Bank Loans  
Floating Rate  
First Lien Senior Secured  
>90% of Portfolio Rated BB and B  
Actively Managed  
Portfolio Managed to Specific Parameters  
Monthly Loan-Level Transparency  
Average Life of Loan Approximately 3 Years

## Liabilities

**CLO Senior Tranches**  
AAA  
AA  
A

**CLO Mezzanine Tranches**  
BBB, BB, B

**CLO Equity**  
Unrated, Residual Stake, First Loss Position

Source: JP Morgan, S&P Global



# CLO TRANCES

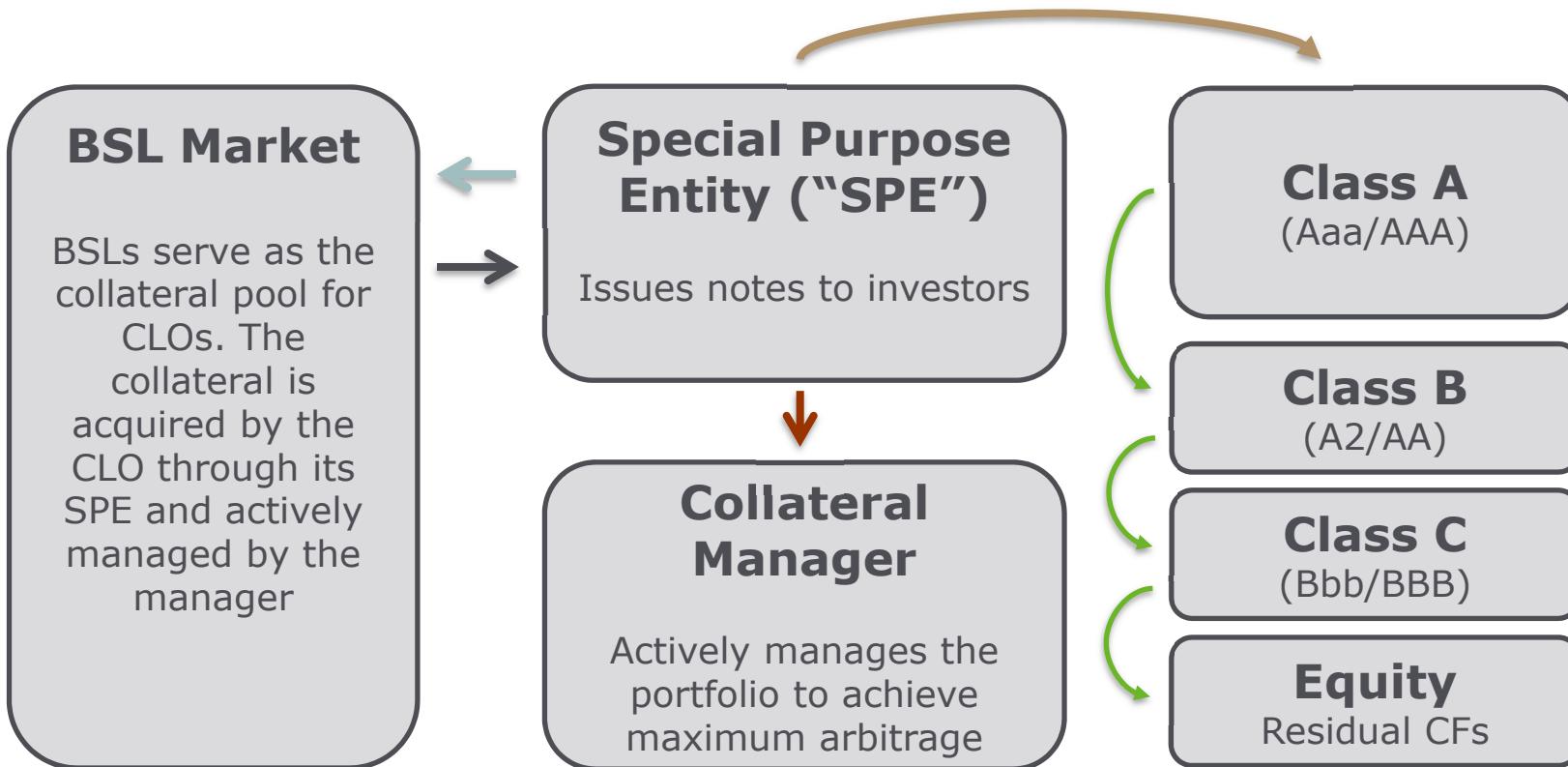
- **Senior tranches: AAA, AA, A**
  - The most senior tranches with the lowest interest rate. These are typically rated 'AAA' or 'AA' and make up the bulk of total debt issued.
  - Typically the controlling class and are given greater control over changes to the indenture
- **Mezzanine tranches: BBB, BB, B**
  - Risker than the senior tranche but still well protected against default and pays the highest amount of promissory interest
- **Equity (first-loss position)**
  - Receives residual cash flows only after the debt tranches are paid. Its payments are not promised amounts like the debt classes above

Class	Rating	Balance	Subordination	Spread
A	AAA	\$650	35%	L+120
B	AA	\$100	25%	L+160
C	A	\$75	17.5%	L+210
D	BBB	\$50	12.5%	L+300
E	BB	\$50	7.5%	L+560
Equity	N/A	\$75	0%	N/A
Total	N/A	\$1,000	N/A	N/A

\*The above table is for illustrative purposes only. CLO debt stacks can vary manager by manager, vintage by vintage  
\*\*Source: JPMorgan, S&P Global



# CLO STRUCTURE AND WATERFALL EXAMPLE



# CHOOSING YOUR TRANCHE(S)

- **Before choosing how you will invest in CLOs, it is important to consider which tranche(s) you will seek to invest in**
- **Investment grade tranches can offer attractive risk-adjusted return potential compared to similarly rated corporate debt, but the total return is limited**
  - Implementation can be difficult away from large SMAs, as asset managers require high capital allocations to launch dedicated IG CLO funds
- **Mezzanine tranches can offer attractive return potential but spreads in recent years have not compensated adequately for risk**
  - Mezz spreads can widen quickly and meaningfully during periods of market volatility, making them attractive as a potential opportunistic allocations
  - However, this dynamic can make CLO mezz a difficult standalone allocation
- **CLO equity offers the greatest return potential, but investors need to be comfortable with significant periods of volatility over a market cycle**

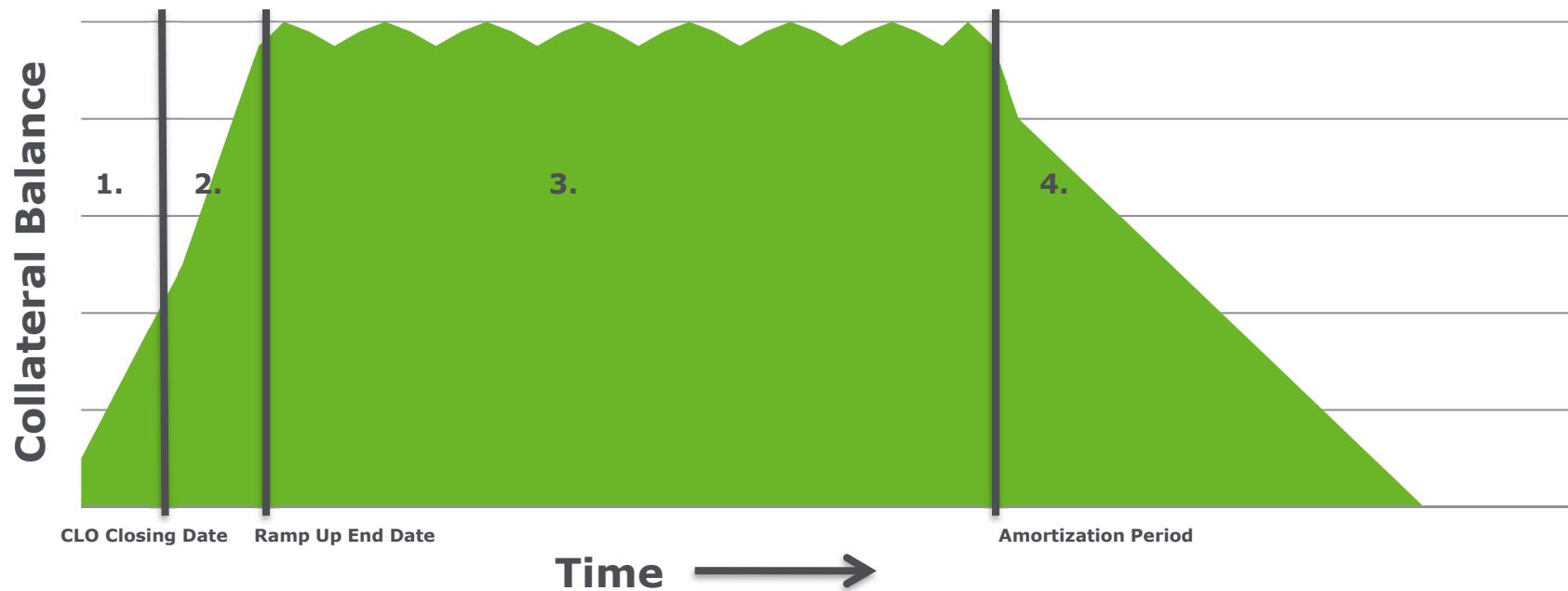


# INTRO TO ARBITRAGE CLOS

- **Arbitrage CLOs exist to earn a spread between their assets and liabilities**
  - “Funding Gap” = Return on Assets – Defaults – Cost of Liabilities – Expenses
  - Return on Assets determined by average leveraged loan spread and active portfolio management by CLO manager
  - Cost of Liabilities for a CLO structure referred to as the Weighted Average Cost of Funding (WACF).
- **Collateral performance determines return for CLO Equity**
  - Mostly corporate floating rate debt, primary or secondary issuance
    - Broadly syndicated, single B rated paper on average
  - Majority of the collateral ( $\geq 90\%$ ) is senior secured loans
    - Many deals may contain small concentrations of high-yield and second lien loans
    - Some CLO's may use middle market loans to boost yields
    - Exposure to non-senior secured loans is limited by a CLO's indenture
- **CLOs are transparent; most assets have public ratings, disclose loan level holdings monthly, and hold annual financial audits**
- **CLOs provide vital source of funding for U.S. non-investment grade corporations**



# COLLATERAL MANAGEMENT OVER A CLO LIFE



## CLO Timeline

CLO Timeline			
1.	Warehouse Period	Warehouse Bank provides CLO Manager financing to acquire assets.	0-18 Months
2.	Ramp-Up Period	Proceeds from CLO Issuance used to purchase additional assets.	
3.	Reinvestment Period	Collateral Manager permitted to actively trade underlying assets. Principal cash flows from underlying assets can be used by Collateral Manager to purchase new assets.	Old Issuance: 5-7 years New Issuances: 2-4 years
4.	Amortization Period	Cash flows from assets are used to pay down the outstanding notes.	2-4 years or Stated Maturity



Source: Wells Fargo

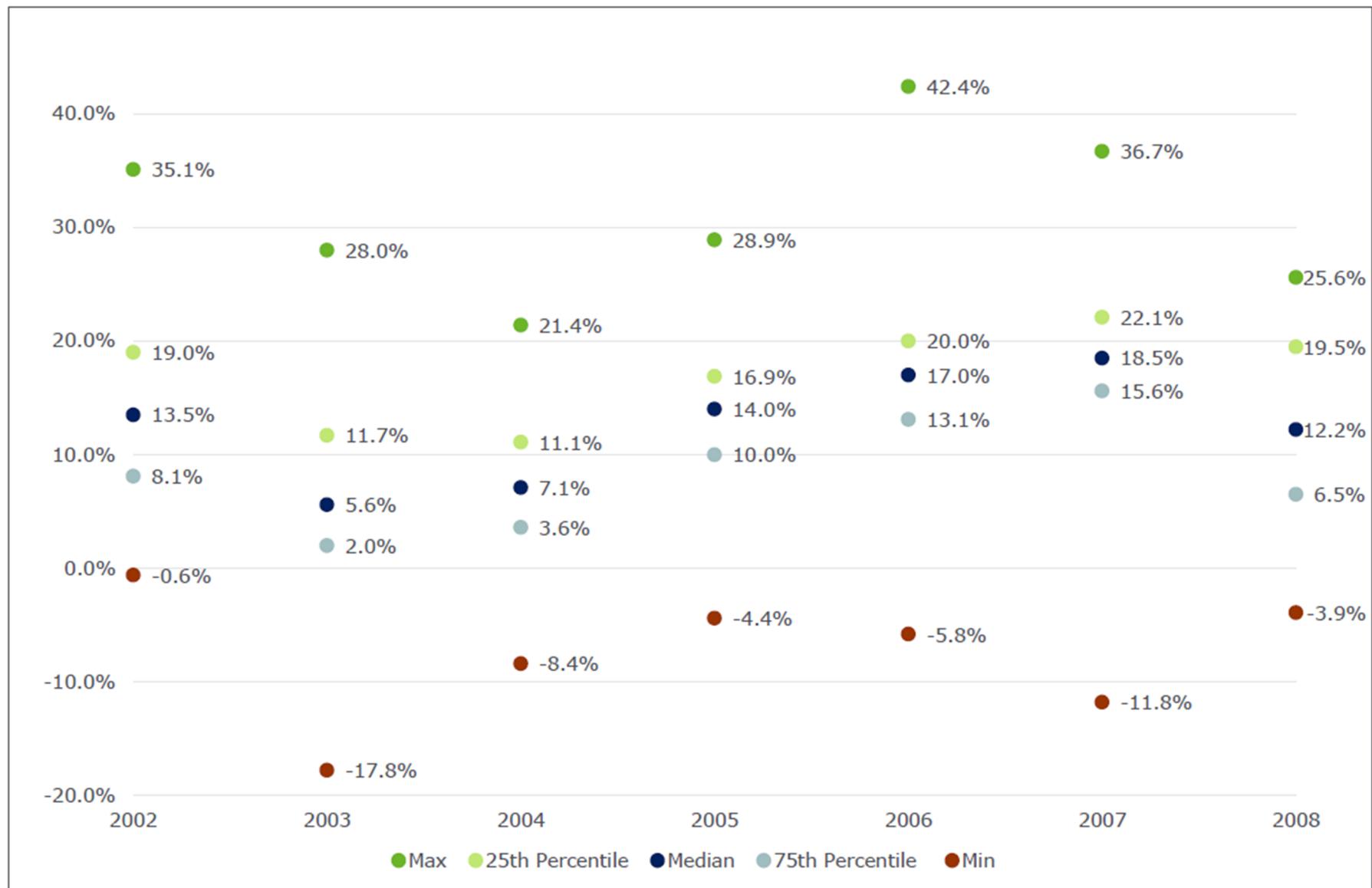
# CLOS: A HISTORICAL COMPARISON

Legacy CLOs vs. New Issuance (1.0 vs. 2.0 deals)		
	CLO 1.0 Pre 2008/2009 Credit Crisis	CLO 2.0 Post Credit Crisis
<b>Size</b>	\$300mm - \$1,000mm Par Value	\$300mm - \$500mm Par Value
<b>Number of Loans</b>	200 – 300 Loans, 15 – 25 Industries	150 – 300 Loans, 15 – 25 Industries
<b>Ratings</b>	Predominately BB, B 90% Senior Secured Corporate Loans	Predominately BB, B 95% Senior Secured Corporate Loans
<b>Other Composition</b>	10% HY Bonds, Other CLOs, and Second Lien Obligations	5% HY Bonds, and Second Lien Obligations Investments in other CLOs typically not allowed
<b>Weighted Average Cost of Liabilities</b>	50 – 100bps	150 – 200bps
<b>Reinvestment Period</b>	5 – 7 years	4 – 6 years
<b>Non-Call Period</b>	3 – 5 years	2 – 3 years
<b>Indentures</b>	Less Restrictive	More Restrictive
<b>Tranche Refinancing Option</b>	Not Permitted	After Non-Call Period

Source: RBS, Octagon, Wells Fargo



# RANGE OF CLO EQUITY IRRS BY VINTAGE



# CLO MARKET DATA

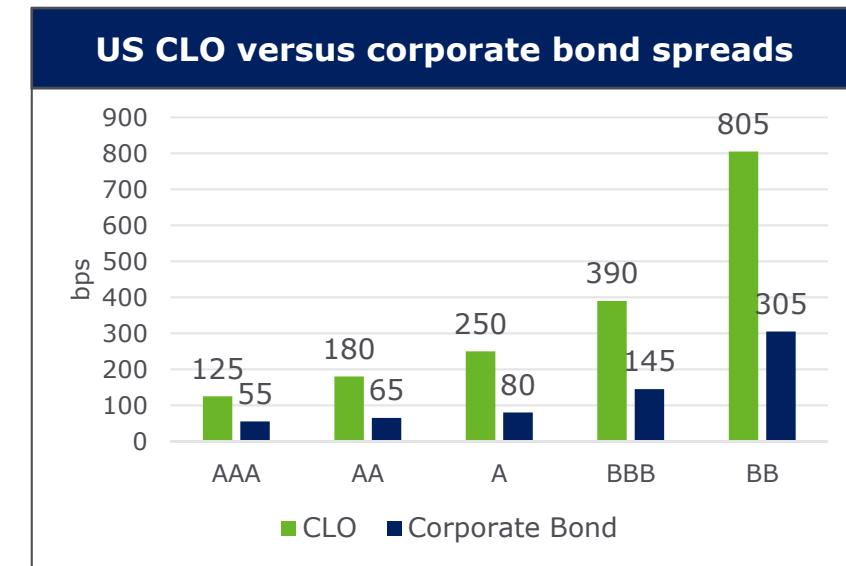
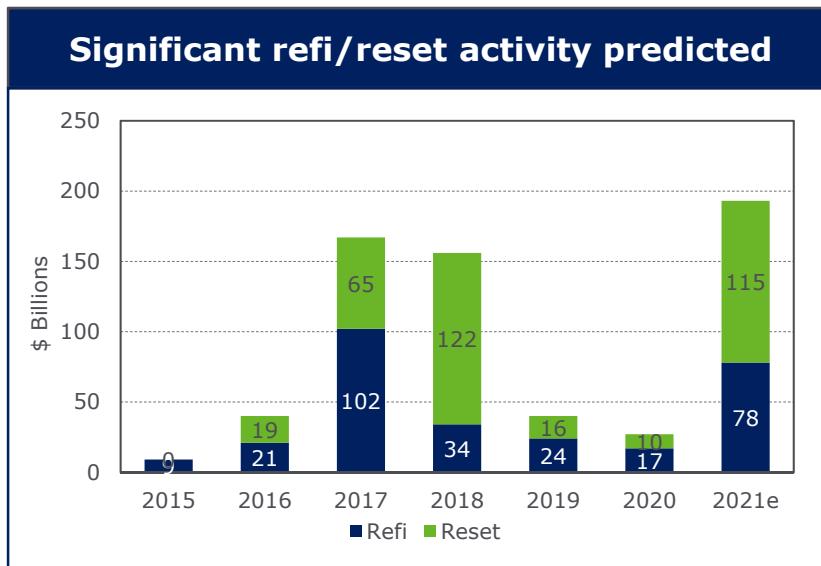
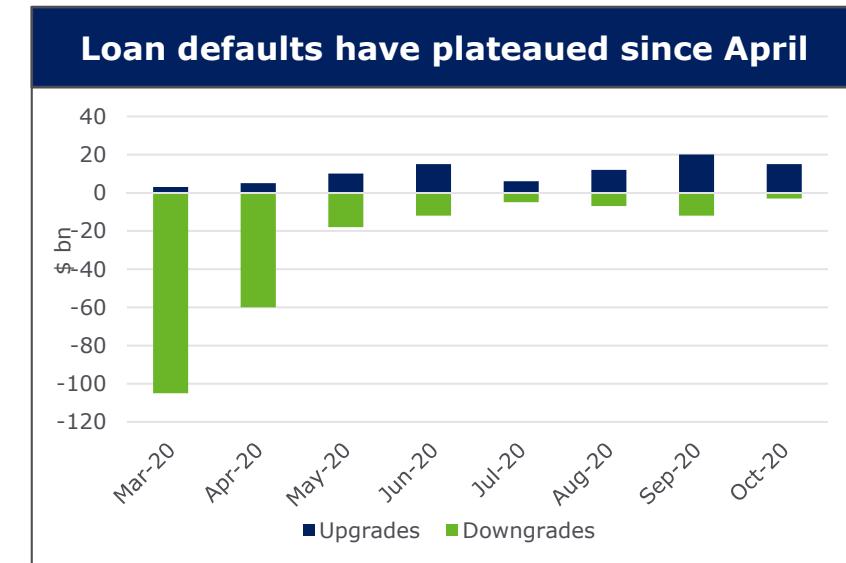
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# CLO OUTLOOK FOR 2021

**Commentary**

- **IG CLOs continue to offer attractive spread pickup compared to similarly rated corporate debt**
  - Direct IG CLO implementation is a challenge
- **CLO mezzanine tranches offer meaningful spread pickup compared to BB corporate bonds**
  - Seek a tactical mandate that can take advantage of junior mezz spreads without locking up capital
- **>90% of outstanding CLOs are expected to exit non-call periods in 2021, opportunity for equity to lock in attractive financing**

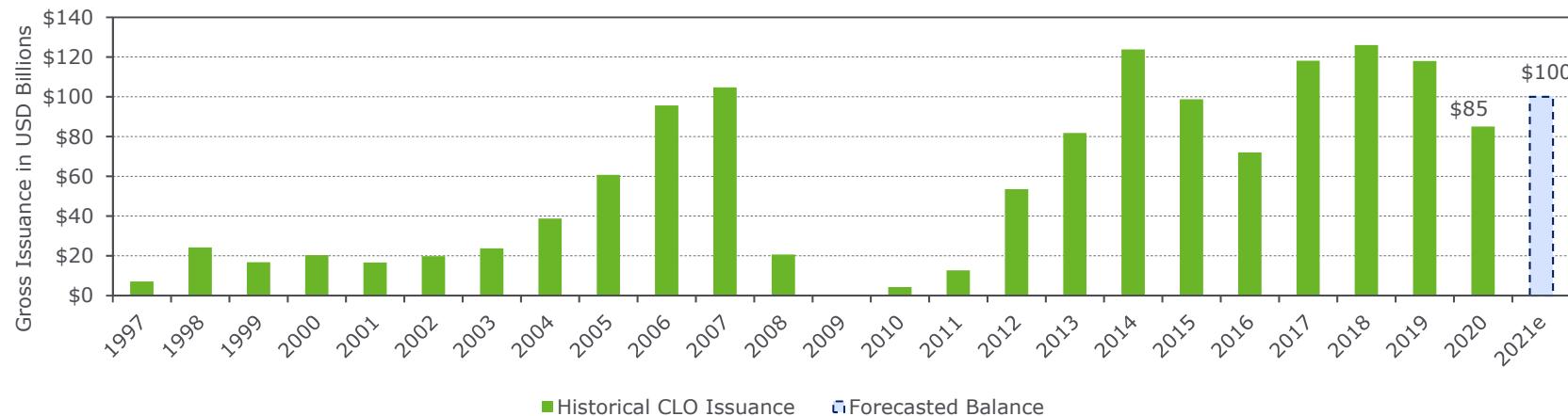


Source: Deutsche Bank,  
Goldman Sachs, Nomura

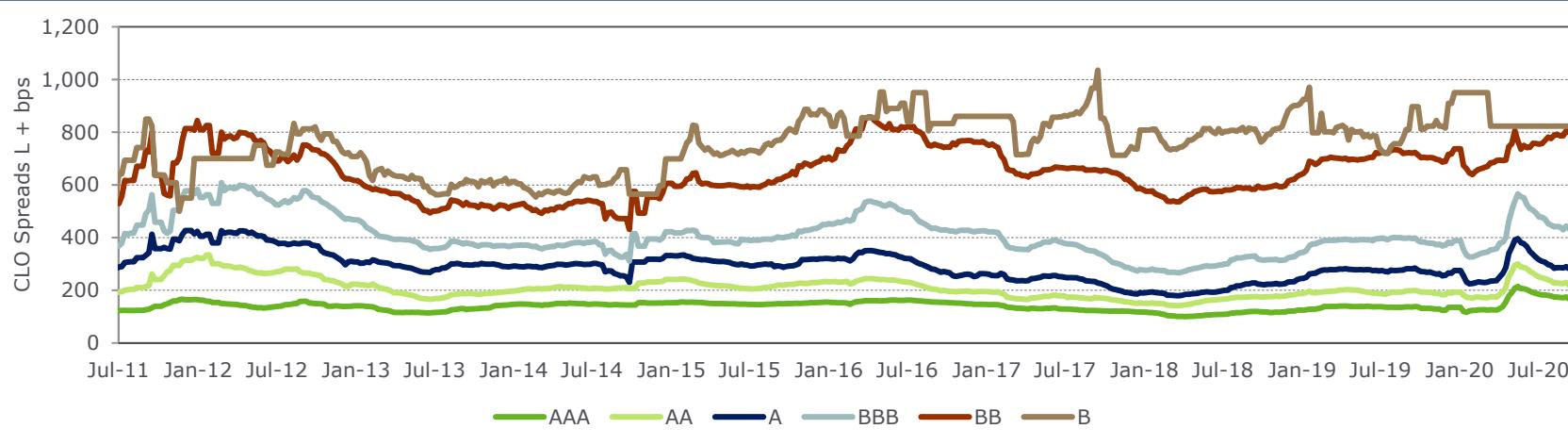


# CLO FUNDAMENTALS

**Uptick in issuance expected YOY**



**Below IG spreads reflecting loan market weakness**



# CLO EQUITY FOCUSED DISCUSSION

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# UNDERSTANDING CLO EQUITY RETURN COMPONENTS

- **CLO Equity Total Return: Primarily includes two main components:**
  - Interest-Only Yield Spread
  - Principal-Only portion
- **Interest Only Spread (IO):**
  - Asset Yield – [CLO Fees (management and deal fees) + Interest Cost]
  - Interest Cost is also called ‘weighted Average Liability’ (WAL)
  - Asset yield changes over time, but cost of liability is typically locked
  - This spread, also known as ‘Funding Gap’ is leveraged, generally in 10x range for 2.0 CLO structures
  - Portfolio losses and defaults affect this spread by reducing the total interest paying asset
- **Principal-Only Portion (PO)**
  - PO is typically valued as an NAV [market value of the collateral assets - principal value of the notes/debt issued]
  - NAV is typically expressed as a percentage of the equity tranche notional value
  - Portfolio losses and defaults affect this return by reducing the value of the collateral
- **In summary, CLO equity receives cash flow from the underlying assets, less fees and CLO liability interest payments (WAL)**



# KEY RISK CONSIDERATIONS FOR CLO EQUITY

- **Timing of the reinvestment period is important**
- **Increase in the cost of leverage will reduce the arbitrage spread available to the equity tranche**
- **Equity tranche is the first loss security, therefore it is important to note the key default/recovery assumptions of a particular CLO**
- **Manager skill set varies considerably from collateral analysis to structuring capabilities**
  - There is a considerable difference in performance of top and bottom quartile managers
- **Consider diversifying investments across different vintages to reduce exposure to a single reinvestment period**

***CLO Equity investors need patient capital***



# **APPENDIX: STRUCTURAL PROTECTION**

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# CLO COVERAGE TESTS

## First Line of Defense: Interest Diversion Test

- **Typically triggered before the OC or IC tests**
  - Measures the adequacy of collateral supporting each class of notes
  - If triggered, interest payments to junior tranches are suspended and used to purchase additional collateral. In some cases, interest payments may be used to pay down subordinate notes

## Second Line of Defense: Overcollateralization (OC) Test

- **Typically triggered before the IC test**
  - Measures the adequacy of collateral supporting each class of notes
  - Expressed as a ratio of the principal collateral value over the outstanding liabilities
  - Subordinate tranches have lower OC thresholds compared to senior tranches
  - If OC test is failed, interest and principal cash flows are diverted from more junior classes of notes to pay down the liabilities in order of seniority until the deal is back in compliance with the test.
  - Deleverages the portfolio and reduces the possibility of greater losses in the future.
  - A CLO manager no longer receives subordinate fees when an OC or IC test is triggered.



Source: RBS, *Collateralized Loan Obligations 101*, September 2012

# CLO COVERAGE TESTS

## Par Preservation

- **Usually trips before the OC trigger or based on OC trigger**
  - Equity cash flows are used to purchase additional collateral
  - Increases Leverage, extends equity maturity, impedes manager's ability to game the OC tests

## Third Line of Defense: Interest Coverage (IC) Test

- **Measures the sufficiency of the interest income of the underlying collateral to cover the scheduled interest payments to the note holders. Like OC tests, each class of notes has its own IC test.**
  - If IC test is failed, interest and principal cash flows are diverted from more junior classes of notes to pay down the liabilities in order of seniority until the deal is back in compliance with the test.
  - Pay-In-Kind: if IC test is failed, subordinate bond holders may be compensated with more bonds equivalent to unpaid interest (dependent on a CLO's indenture).

## Additional CLO Coverage Tests: Turbo Trigger

- **Not standard for most CLOs, interest cash flows are used to accelerate repayment of subordinate (expensive) notes**
  - Subject to all coverage tests being met and a minimum IRR on the equity tranche being achieved
  - De-leverages the structure, reduces rated note subordination, reduces cost of funding



Source: RBS, *Collateralized Loan Obligations 101*, September 2012

# ADDITIONAL STRUCTURAL ENHANCEMENTS

## Event of Default (EoD)

- **Typically when OC falls below a second threshold, a deal is in EoD**
  - Reinvestment period is terminated and all cash flows are used to retire liabilities in order of seniority
  - No standard deal has ever hit EoD because of this clause in the indenture

## Collateral Quality Test

- **Includes tests to ensure collateral quality is adhering to the CLO indenture guidelines (weighted average rating factor (WARF), diversity scores, weighted average life of collateral, weighted average spread, etc.)**
  - If any test fails, CLO manager can only trade the collateral to bring that test in compliance



Source: RBS, *Collateralized Loan Obligations 101*, September 2012

# CLOS: MARKING POLICIES

- ***Underlying assets in CLOs are marked at par and are not subject to mark-to-market volatility, EXCEPT under the following circumstances:***
  - **Default:** When a default occurs, the asset is marked at the lower of market value or anticipated recovery value.
  - **Excess CCC Assets:** When the CCC basket exceeds a predetermined test level (normally 7.5%), the excess CCC assets are held at market value.
  - **Discounted Obligations:** Loans purchased below 80 – 85 (depending on the rating). Initially carried at purchase prices as opposed to par until they trade above 90 for more than 30 days.
  - *These valuations are used to determine whether coverage tests are failed NOT monthly pricing for the CLO tranche. All other assets are marked at par.*
- ***CLO debt and equity tranches are marked on a regular basis (at least monthly) by dealers and are subject to market volatility***
- ***Many long-term CLO equity investors use a “mark-to-model” approach***
  - CLO Equity is generally considered a Level III asset.
  - Investors maintain their own pricing models with embedded assumptions instead of relying on dealer marks. *Operational Due Diligence and comfort with a particular Firm’s marking policies are key for this strategy.*



# CLOS: EQUITY TRANCHE REDEMPTION FEATURES

- **Optional Redemption Call**
  - Equity tranche holders have the right to redeem their notes after a stated non-call period
  - Non-call periods have varied based on CLO vintage
    - 2003-07 vintage had call protection extending 3-5 years
    - 2010-11 vintage had call protection extending 1-3 years
  - Equity holders typically choose to redeem when funding gap decreases
- **Call options vary between CLO 1.0 vs. CLO 2.0**
  - Legacy issues (CLO 1.0): Options to call or refinance a deal
  - New issues (post 2008 2009, CLO 2.0): Options to call, refinance, or re-price a deal
- **Call options defined:**
  - **Call:** the CLO manager must liquidate all collateral at the existing market value and repay note holders with sale proceeds
  - **Refinance:** the CLO manager to obtain a loan or issue new notes to replace existing notes
  - **Re-price:** the CLO manager reduces the spread over Libor for an entire class of notes
    - Does not require full par value or redemption to be there for the entire class of notes that are being re-priced (but is there for investors that disagree with the spread reduction)
    - Less time consuming than refinancing
    - Typically not allowed for AAA tranche



# **APPENDIX: INVESTING IN CLOS**

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# HOW DO WE GET “INVESTMENT GRADE” NOTES FROM “SPECULATIVE GRADE” LOANS?

- **Credit enhancements are used to reallocate the risk of default and protect the debt stacks**
- **Subordination gives priority to cash flows to each debt tranche and distancing each tranche from losses**
  - Junior tranches, including equity, are more exposed to losses, protecting more senior tranches from exposure to potential default or losses
- **Excess spread is the excess income generated by the pool of assets over the interest due from the CLO’s liabilities**
  - Ideally, a CLO makes interest payments to the noteholders of its liabilities on a given payment date. The excess interest goes to the equity holders.
  - However, if a CLO collateral pool experiences stress the CLO will redirect interest payments away from equity (and sometimes the junior mezz) and use them to pay down the principal on the most senior class of notes and restoring credit enhancement to classes senior to the one seeing its interest redirected.
- **Overcollateralization is a key tool used to protect CLO debtholders. The CLO uses proceeds from the sale of equity interest to purchase additional assets to back the transaction**
  - The equity tranche helps the CLO absorb losses if sufficient interest income isn’t available to pay all tranches or if the total value of the collateral fails to cover full principal repayment



# CLO VS. CDO

## Broadly-Syndicated Arbitrage Collateralized Loan Obligations (CLOs)

- **Mostly corporate floating-rate debt (CUSIP security, publicly traded, average rating of BB to B)**
- **Majority of the loans (>95%) in the collateral are senior secured loans**
- **Collateral performance determines CLO return**
- **CLOs provide vital source of funding for U.S. non-investment grade corporations**
- **CLOs are transparent; most assets have public ratings and audited financial statements, monthly or quarterly trustee reports with visibility into underlying holdings**

## CLOs are not CDOs

	CLOs	CDOs
Underlying Collateral	Non-Investment Grade Corporate Loans	Mezzanine Tranches & High Grade ABS
Transparency	Monthly trustee reports with loan level transparency	Monthly trustee reports with ABS level transparency
Managed vs. Static	Actively managed	Static Pool
10 Year AAA Cumulative Default Rate (1993-2019)	0.0%	39.1%
10 Year AA Cumulative Default Rate (1993-2019)	0.0%	48.2%

Source: RBS, Wells Fargo , Moody's Investor Services, Inc., Barclays



# CHOOSING YOUR TRANCHE(S)

- **Before choosing how you will invest in CLOs, it is important to consider which tranche(s) you will seek to invest in**
- **Investment grade tranches can offer attractive risk-adjusted return potential compared to similarly rated corporate debt, but the total return is limited**
  - Implementation can be difficult away from large SMAs, as asset managers require high capital allocations to launch dedicated IG CLO funds
- **Mezzanine tranches can offer attractive return potential but spreads in recent years have not compensated adequately for risk**
  - Mezz spreads can widen quickly and meaningfully during periods of market volatility, making them attractive as a potential opportunistic allocations
  - However, this dynamic can make CLO mezz a difficult standalone allocation
- **CLO equity offers the greatest return potential, but investors need to be comfortable with significant periods of volatility over a market cycle**



# CHOOSING YOUR APPROACH

- **Most investors will access CLO exposure through an investment manager rather than purchasing notes from a collateral manager**
  - In such cases, there are four primary choices investors can make:
    - 1) Multi-Sector Structured Credit Fund
    - 2) CLO hedge fund
    - 3) Private equity style CLO drawdown fund
    - 4) Separately managed account
- **Each approach has a set of unique benefits and drawbacks**
  - We will detail important considerations on the pages that follow



# CHOOSING YOUR APPROACH: MULTI-SECTOR

- **Multi-sector structured credit funds are hedge fund vehicles that typically invest across a broad set of sectors and asset classes**
  - Sectors can include, but aren't limited to, residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), asset-backed securities (ABS), and collateralized loan obligations (CLOs)
  - CLOs can make up as little as single-digit to as much as double-digit exposure within these funds
  - Exposure tends to be tactical and opportunistic, but manager expertise is vital
- **Unique Pros**
  - Allows investors to tactically and opportunistically gain exposure to CLOs without dedicating to a CLO-only mandate
  - Can quickly take advantage of dislocations in the market or scale back exposure in more benign market environments
- **Cons**
  - Potential for asset-liability mismatch: CLOs can often times be illiquid. It is vitally important to consider the liquidity parameters of CLOs within a quarterly-or-better fund liquidity structured. A high allocation to CLOs could impair the multi-sector fund if it needs to liquidate assets to meet investor redemptions
  - CLO performance can vary significantly between collateral managers, and it takes a skilled investment manager to be able to source, analyze, and invest in CLOs. A multi-sector fund with a small allocation to CLOs may not dedicate the resources necessary to choosing the best in class collateral managers



# CHOOSING YOUR APPROACH: CLO HEDGE FUND

- **Some investors choose a CLO specialist that invests through an evergreen hedge fund as opposed to a private equity like drawdown fund**
- **Unique Pros**
  - Specialty: CLO hedge funds tend to be run by CLO specialists who only invest in the asset class. This can give investors a specialized approach to investing in CLOs with best in class investors
  - Vintage diversification is an important consideration for every CLO investor to make. Like wine, some CLO vintages are better than others. Evergreen hedge funds allow investors to gain broad exposure to CLOs across many vintages, cutting back on vintage risk should a market dislocation occur
  - An evergreen fund (with adequate liquidity terms!) should allow investment managers to be more nimble during periods leading up to and through potential market dislocation compared to drawdown style funds
- **Cons**
  - Potential for asset-liability mismatch: CLOs can often times be illiquid. It is vitally important to consider the liquidity parameters of CLOs within a quarterly-or-better fund liquidity structured. A high allocation to CLOs could impair the multi-sector fund if it needs to liquidate assets to meet investor redemptions
  - Investment managers utilizing this approach must structure the liquidity terms in an appropriate manner to avoid potential asset-liability mismatch. NEPC has advocated for lock-ups of up to three years and offered on a rolling basis. While this may seem onerous to investors, these liquidity terms are meant to protect the fund and all LPs from redemptions at inopportune times



# CHOOSING YOUR APPROACH: DRAWDOWN FUND

- **Drawdown funds that are structured like a private equity fund, in which capital is committed and drawn over time before being wound down, have become a popular way for investors to access CLO exposure**
  - These funds typically invest in CLO equity and occasionally junior debt tranches
- **Unique Pros**
  - The cash flowing nature of CLOs allow investors to offset some of the J-curve that is experienced through other allocations within a private credit portfolio
  - Drawdown funds do not face a threat of asset-liability mismatch as investors cannot redeem
- **Cons**
  - Potential conflicts of interest can exist depending on the manager and have become a growing consideration in the CLO space in recent years. Potential conflicts can include a collateral manager “stuffing” deals with their own equity in order to raise capital on senior tranches. Investors should be mindful of this and seek to avoid collateral managers who engage in this practice
  - Vintage concentration is important to consider within drawdown style funds. Some vintages have larger exposure to some ‘problem’ sectors like oil and gas, and such vintage issues can materialize years after the investment period ends

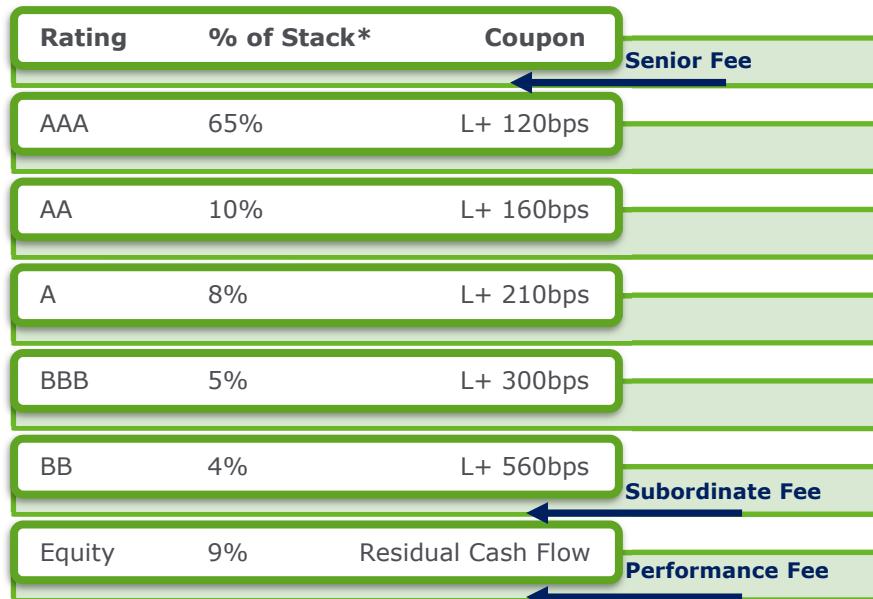
# CHOOSING YOUR APPROACH: SMA

- **Separately managed accounts are a way for larger asset owners to gain customized exposure to CLOs**
- **Unique Pros**
  - SMAs allow asset owners to customize a mandate to investing in CLOs, including but not limited to tranche exposure, underlying collateral manager selection/avoidance, geographic exposure, etc.
  - This approach allows asset owners to take a similar approach to an evergreen fund without the threat of asset-liability mismatch
  - This approach may be more cost effective than a commingled approach, depending on which investment manager is selected
- **Cons**
  - The required capital commitment for a SMA can be prohibitive for smaller investors and will vary by investment manager. NEPC has seen minimum investment sizes as low as \$50 million and as high as \$200 million for a SMA



# HOW IS A CLO MANAGER PAID?

- CLO Manager takes a 10-20bps **Senior Fee** before notes are paid.
- Debt notes are paid in order of seniority
- CLO Manager takes a 20-40bps **Subordinate Fee** if all notes are paid
- Equity tranche receives excess payments
- CLO Manager takes an additional **Performance Fee** (typically 10-20%) if certain IRR hurdles are met (average ranges 8-12%)
- Waterfall structure is typical
- AAA, AA, A notes are referred to as Senior Tranches or Senior CLO Debt
- BBB, BB, B notes are also known as Mezzanine Tranches



\*This is for illustrative purposes only. CLO debt stacks can vary manager by manager and vintage by vintage.

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- **Past performance is no guarantee of future results.**
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# ALTERNATIVE INVESTMENT DISCLOSURES

**It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds and private equity:**

- 1. Performance can be volatile and investors could lose all or a substantial portion of their investment**
- 2. Leverage and other speculative practices may increase the risk of loss**
- 3. Past performance may be revised due to the revaluation of investments**
- 4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms**
- 5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value**
- 6. These funds are not subject to the same regulatory requirements as registered investment vehicles**
- 7. Managers may not be required to provide periodic pricing or valuation information to investors**
- 8. These funds may have complex tax structures and delays in distributing important tax information**
- 9. These funds often charge high fees**
- 10. Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy**

